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1 CCCACGCGTCCGGCCCGCGGCTCCGGAGCGGCTCTGCCTTCCCGAGCGCGGGACGCGGC 60
61 GCCCTGGGGGAGGAGGGCGAAGCGACGCGGCGATGGCTCCGCGGGCACTCCCGGGGTCCG 120
1 M A P R A L P G S A 10
121 CCGTCCTAGCCGCTGCTGTCTTCGTGGGAGGCGCCGTGAGTTCGCCGCTGGTGGCTCCGG 180
11 V L A A A V F V G G A V S S P L V A P D 30
181 ACAATGGGAGCAGCCGCACATTGCACTCCAGAACAGAGACGACCCCGTCGCCCAGCAACG 240
31 N G S S R T L H S R T E T T P S P S N D 50
241 ATACTGGGAATGGACACCCAGAATATATTGCATACGCGCTTGTCCTGTGTTCTTTATCA 300
51 T G N G H P E Y I A Y A L V P V F F I M 70
301 TGGGTCTCTTTGGCGTCCTCATTTGCCACCTGCTTAAGAAGAAAGGCTATCGTTGTACAA 360
71 G L F G V L I C H L L K K K G Y R C T T 90
361 CAGAAGCAGAGCAAGATATCGAAGAGGAAAAGGTTGAAAAGATAGAATTGAATGACAGTG 420
91 E A E Q D I E E E K V E K I E L N D S V 110
421 TGAATGAAAACAGTGACACTGTTGGGCAAATCGTCCACTACATCATGAAAAATGAAGCGA 480
111 N E N S D T V G Q I V H Y I M K N E A N 130
481 ATGCTGATGTCTTAAAGGCGATGGTAGCAGATAACAGCCTGTATGATCCTGAAAGCCCCG 540
131 A D V L K A M V A D N S L Y D P E S P V 150
541 TGACCCCCAGCACACCAGGGAGCCCGCCAGTGAGTCCTGGGCCTTTGTCACCAGGGGGGA 600
151 T P S T P G S P P V S P G P L S P G G T 170
601 CGCCAGGGAAGCACGTCTGTGGCCATCATCTGCATACGGTGGGCGGTGTTGTCGAGAGGG 660
171 P G K H V C G H H L H T V G G V V E R D 190

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FIG. 1A

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661 ATGTGTGTCATCGGTGTAGGCACAAGCGGTGGCACTTTATAAAGCCCCTAACAAGTCCA 720  
191 V C H R C R H K R W H F I K P T N K S R 210

721 GAGAGAGCAGACCACGGCGCCAAGGCGAGGTCACGGTCCTTTCTGTTGGCAGATTTAGAG 780  
211 E S R P R R Q G E V T V L S V G R F R V 230

781 TTACAAAAGTGGAGCACAAGTCAAACCAGAAGGAACGGAGAAGCCTGATGTCTGTTAGTG 840  
231 T K V E H K S N Q K E R R S L M S V S G 250

841 GGGCTGAAACCGTCAATGGGGAGGTGCCGGCAACACCTGTGAAGAGAGAACGCAGTGGCA 900  
251 A E T V N G E V P A T P V K R E R S G T 270

901 CAGAGTAGCAGGTGAGCCGTGGTTTTGGTGACATTGGGGGCAGAGTGGTGCAGGGTGAGG 960  
271 E \* 272

961 AGAAGGTACTTGGAGCCTCCCAGGTGCTGTGGCAGCATAGGAATGGTATTTGACAGGGAA 1020

1021 GTGGGAGAGCTTTCCTTGACCCAGGAAGACTGAGGGGGACTGAACATGATTACTTGTCTG 1080

1081 CCTAGAGCTTCTTGTAAGAAGTCACAACTTAGTGCCTCCAGGGGCTTGGCCTGTGTGA 1140

1141 TAATGAGGATAGAGGATTACTTGTGAGGCAATGTGGCATGGTGGGGATTGTGGCAAATA 1200

1201 GAATTCACATCACCACCATATAGGGCTTGCAATTACCACGAGGCAGAAAGCACCTAGTGT 1260

1261 TGCTGCATCTTCTTACGCAAAAAAAAAAAAAA 1291

FIG. 1B

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      .       .       .       .       .
1 CGGACGCGTGGGGGGCTATATATGCTCTTCCTGCTTGTGCTGGTCTTCTTCCTCATGGGC 60
1 R T R G G L Y M L F L L V L V F F L M G 20

      .       .       .       .       .
61 CTGGTAGGCTTCATGATCTGCCACGTGCTCAAGAAGAAGGGCTACCGCTGCCGCACGTCG 120
21 L V G F M I C H V L K K K G Y R C R T S 40

      .       .       .       .       .
121 AGGGGCTCTGAGCCTGACGATGCCCAGCTTCAGCCCCCTGAGGACGATGACATGAATGAG 180
41 R G S E P D D A Q L Q P P E D D D M N E 60

      .       .       .       .       .
181 GACACAGTAGAGAGGATTGTTGCTGCATCATCCAGAATGAAGCCAATGCTGAGGCCTTG 240
61 D T V E R I V R C I I Q N E A N A E A L 80

      .       .       .       .       .
241 AAGGAGATGCTGGGGGACAGTGAAGGAGAAGGGACAGTGCAGCTGTCCAGTGTGGATGCC 300
81 K E M L G D S E G E G T V Q L S S V D A 100

      .       .       .       .       .
301 ACCTCCAGCCTGCAGGACGGAGCCCCCTCCCATCATCACACAGTGCACCTGGGCTCTGCA 360
101 T S S L Q D G A P S H H H T V H L G S A 120

      .       .       .       .       .
361 GCCCCTTGCCTCCATTGCAGCCGAGCAAGAGGCCTCCACTTGTCCGTCAGGGACGCTCC 420
121 A P C L H C S R S K R P P L V R Q G R S 140

      .       .       .       .       .
421 AAGGAAGGAAAAAGCCGCCCCCGGACAGGGGAGACCACTGTGTTCTCTGTGGGCAGGTTC 480
141 K E G K S R P R T G E T T V F S V G R F 160

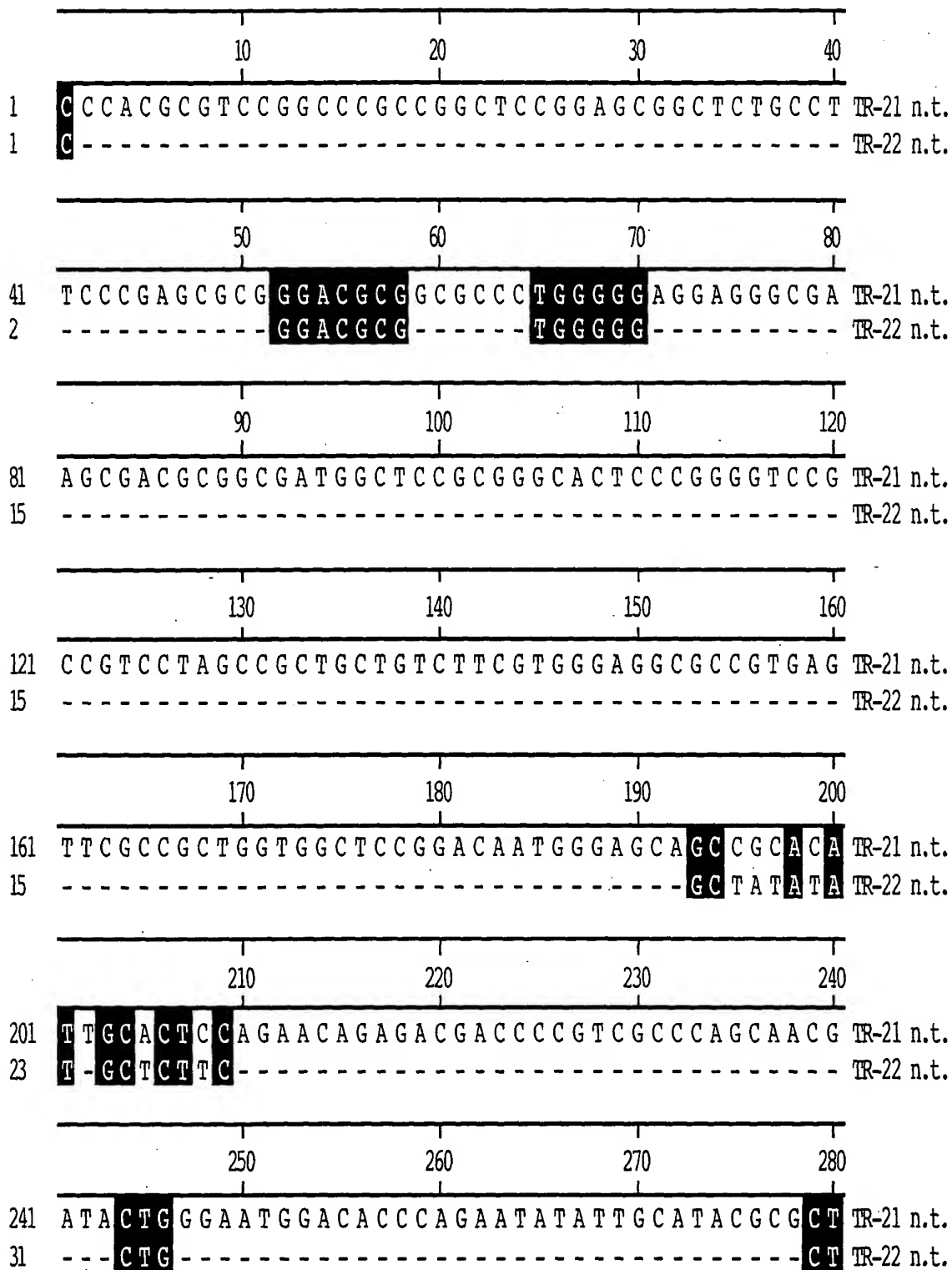
      .       .       .       .       .
481 CGGGTGACACACATTGAGAAGCGCTATGGACTGCACGAACACCGTGATGGCTCCCCCACA 540
161 R V T H I E K R Y G L H E H R D G S P T 180

      .       .       .       .
541 GACAGGAGCTGGGGCTCTGGTGGGGGACAGGACCCAGGGGTG 582
181 D R S W G S G G G Q D P G V 194

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FIG. 2

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**FIG. 3A**

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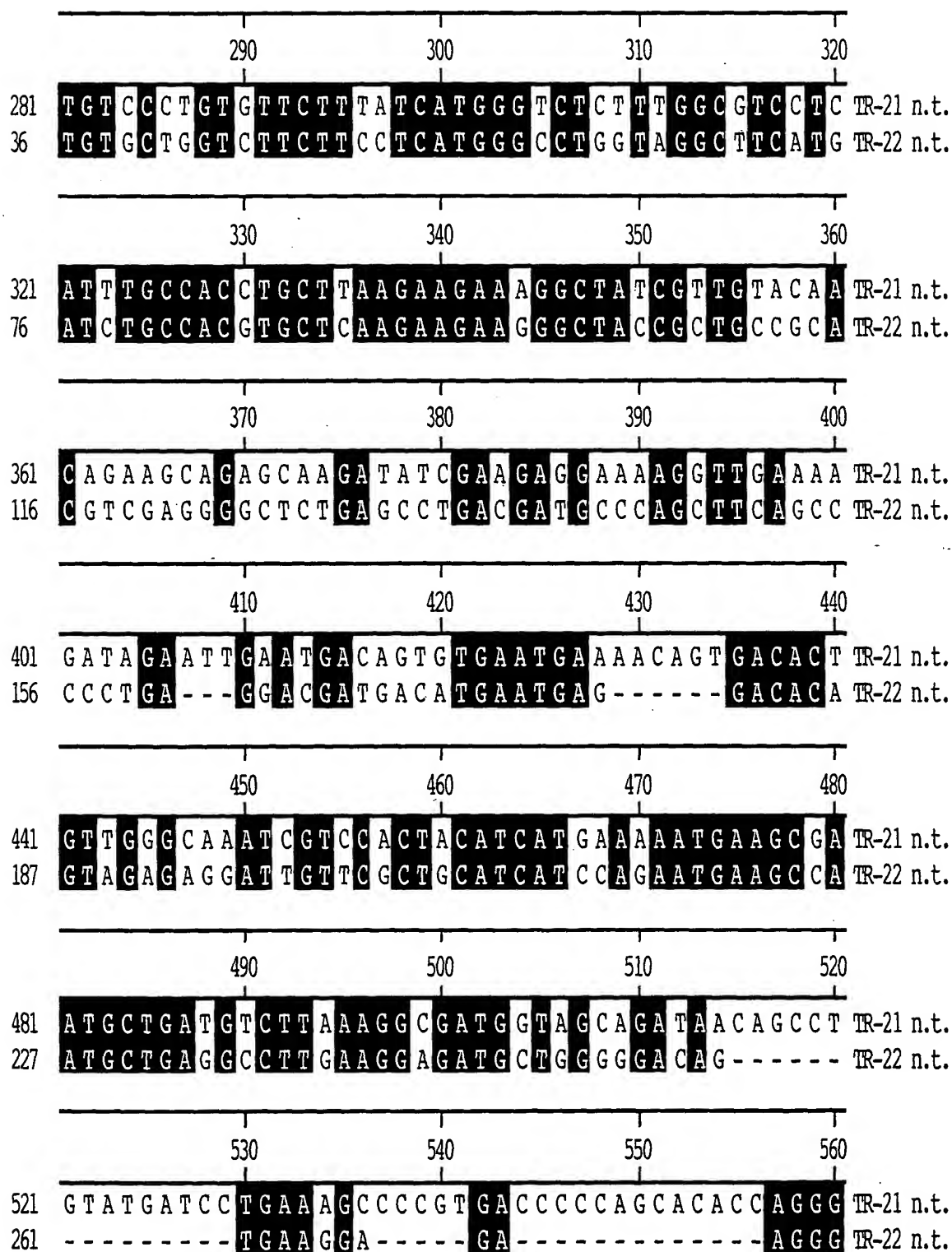


FIG. 3B

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[illegible]

**FIG. 3C**

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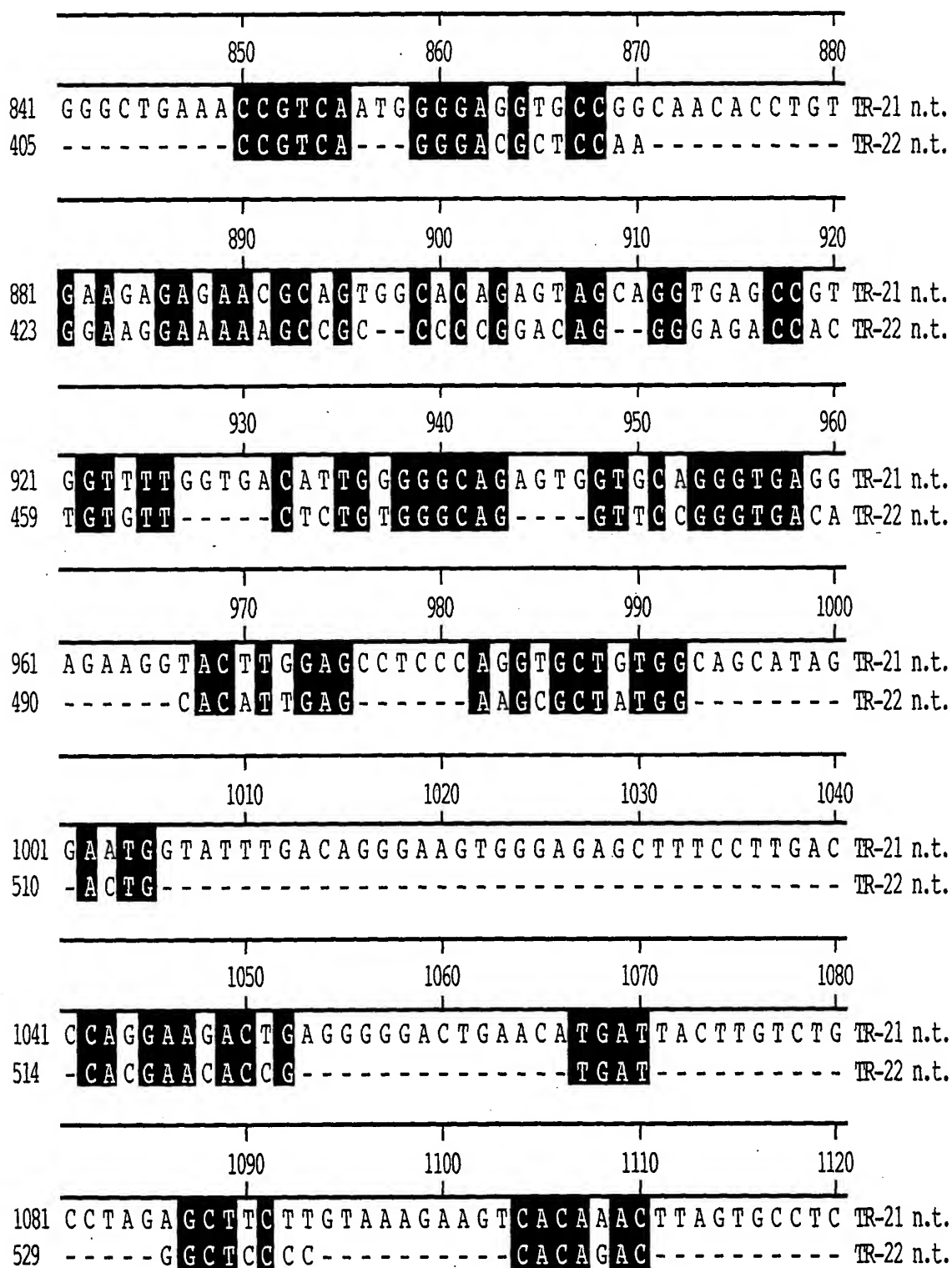
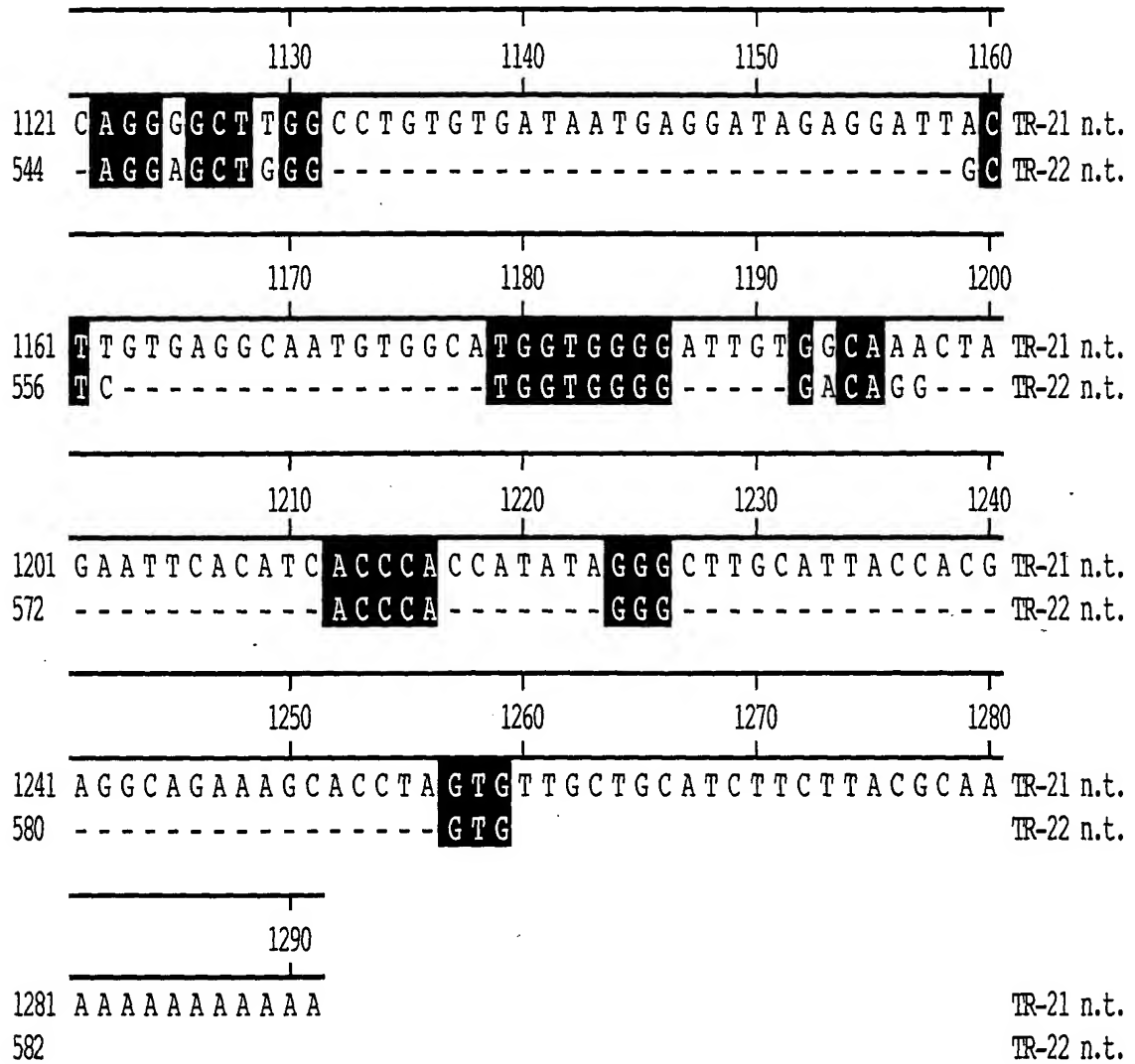


FIG. 3D

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Decoration 'Decoration #1': Shade (with solid black) residues that match the consensus named 'Consensus #1' exactly.

FIG. 3E

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		10	20	30	
1	M A P R A L P G S A V L A A A V F V G G A V S S P L V A P D				TR-21 a.
1	R T R G G L - - - - - - - - - - - - - - - - - - - - - - - -				TR-22 a.
		40	50	60	
31	N G S S R T L H S R T E T T P S P S N D T G N G H P E Y I A				TR-21 a.
7	- - - - - - - - - - - - - - - - - - - - - - - - Y M L				TR-22 a.
		70	80	90	
61	Y A L V P V F F I M G L F G V L I C H L L K K K G Y R C T T				TR-21 a.
10	F L L V L V F F L M G L V G F M I C H V L K K K G Y R C R T				TR-22 a.
		100	110	120	
91	E A E Q D I E E E K V E K I E L N D S V N E N S D T V G Q I				TR-21 a.
40	S R G S E P D D A Q L Q P P E - D D D M N E - - D T V E R I				TR-22 a.
		130	140	150	
121	V H Y I M K N E A N A D V L K A M V A D N S L Y D P E S P V				TR-21 a.
67	V R C I I Q N E A N A E A L K E M L G D S E - - - - - - - -				TR-22 a.
		160	170	180	
151	T P S T P G S P P V S P G P L S P G G T P G K H V C G H H L				TR-21 a.
89	G E G T V Q L S S V D A T S S L Q D G A P S H - - - H T V				TR-22 a.
		190	200	210	
181	H T V G G V V E R D V C H R C R H K R W H F I K P T N K S R				TR-21 a.
116	H L G S A A - - - - P C L H C S R S K R P P L V R Q G R S K				TR-22 a.
		220	230	240	
211	E S R P R - R Q G E V T V L S V G R F R V T K V E H K S N Q				TR-21 a.
142	E G K S R P R T G E T T V F S V G R F R V T H I E K R Y G L				TR-22 a.
		250	260	270	
240	K E R R S L M S V S G A - E T V N G E V P A T P V K R E R S				TR-21 a.
172	H E H R D G S P T D R S W G S G G G Q D P G V				TR-22 a.
269	G T E				TR-21 a.
194					TR-22 a.

Decoration 'Decoration #1': Shade (with solid black) residues that match the consensus named 'Consensus #1' exactly.♪

**FIG. 4**

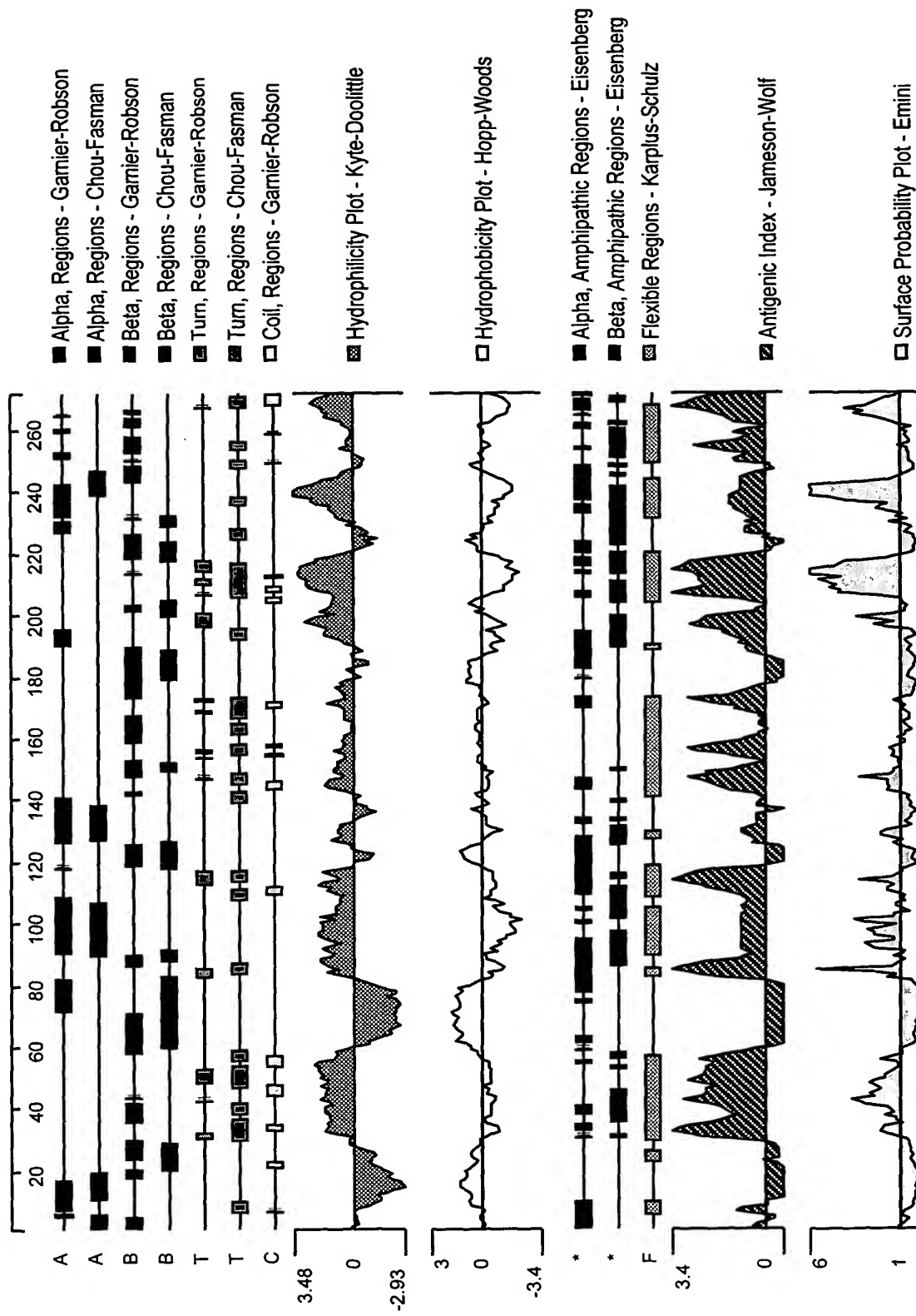


FIG. 5

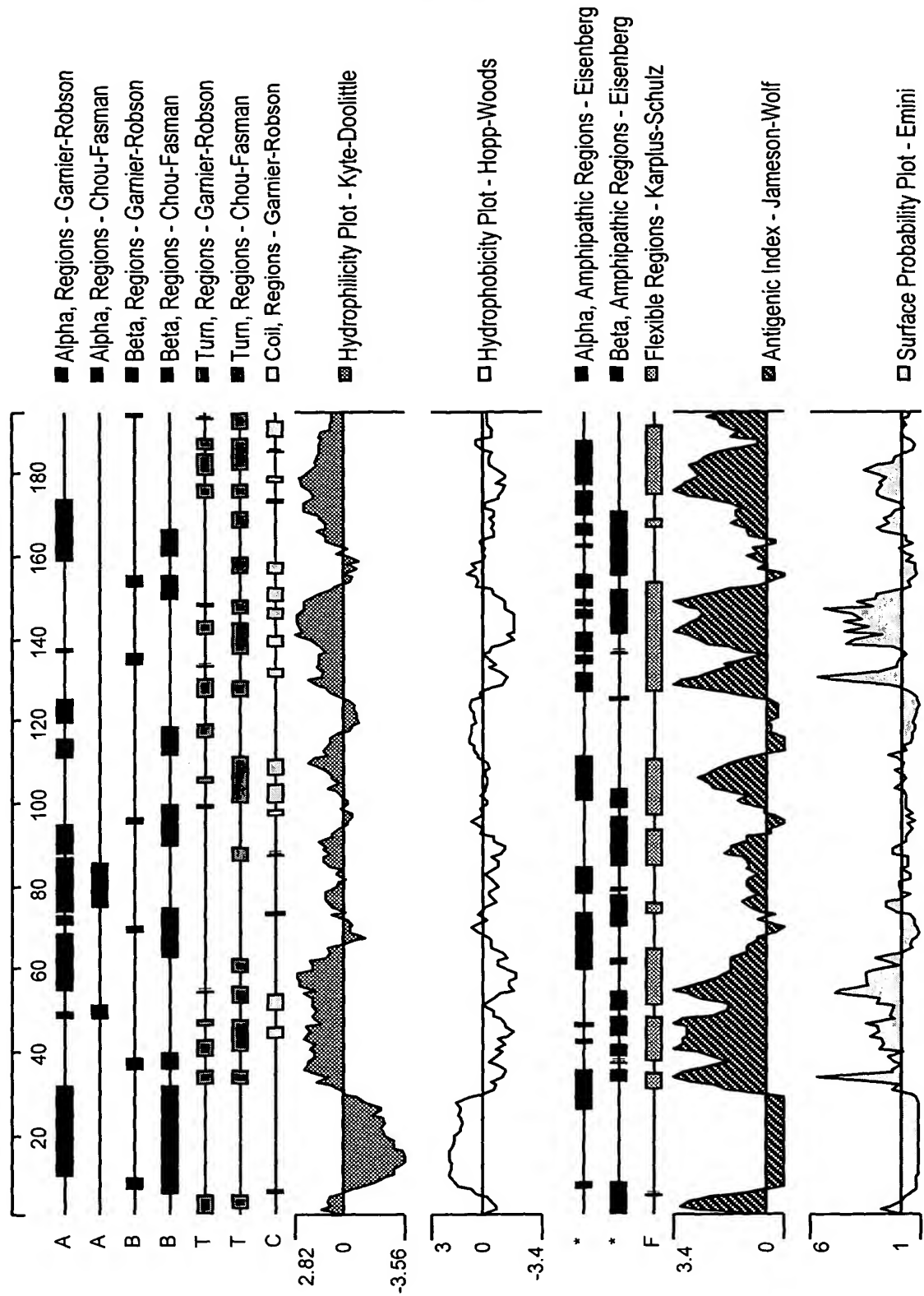
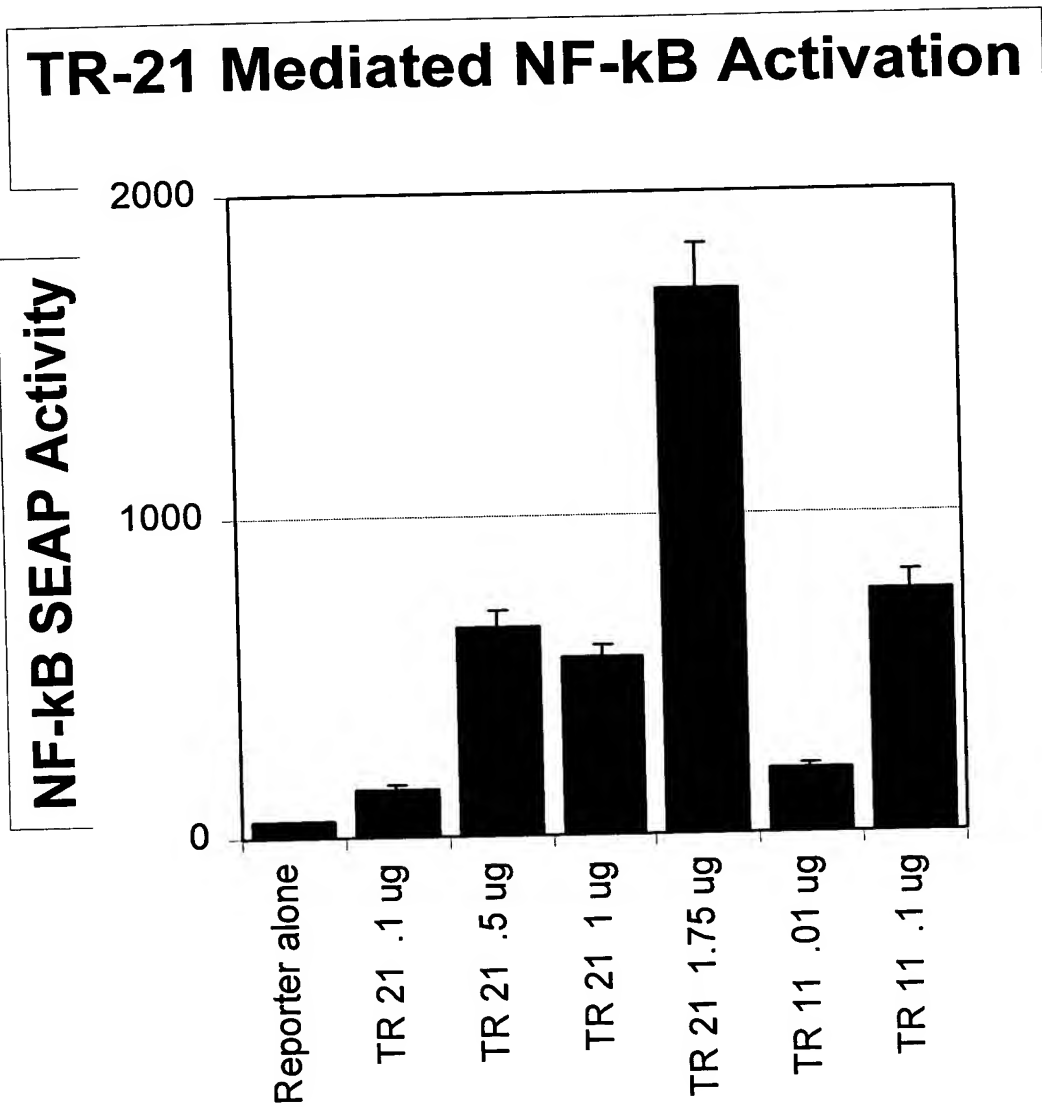


FIG. 6

**FIG. 7**